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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/561,605	12/20/2005	Norihito Okada	59559.00025	6458

32294 7590 12/23/2008

SQUIRE, SANDERS & DEMPSEY L.L.P.
8000 TOWERS CRESCENT DRIVE
14TH FLOOR
VIENNA, VA 22182-6212

EXAMINER	
HUSON, MONICA ANNE	
ART UNIT	PAPER NUMBER
1791	

MAIL DATE	DELIVERY MODE
12/23/2008	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/561,605	OKADA ET AL.	
	Examiner	Art Unit	
	MONICA A. HUSON	1791	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *20 December 2005*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-13* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-13* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *20 December 2005* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *040208,060107,122005*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-3, 5, 7-13 are rejected under 35 U.S.C. 102(b) as being anticipated by Koide (U.S. Patent 6,533,572). Regarding Claim 1, Koide shows that it is known to have a drive apparatus for an injection molding machine (Abstract) characterized by comprising: (a) a driven portion (Figure 1, element 5, 24, 25); (b) a transmission shaft having a screw shaft portion and an output shaft portion and which is connected to the driven portion so as to be rotatable with respect thereto and which is able to advance and retract (Figure 1, element 23); (c) a nut which is threadingly engaged with the screw shaft portion (Figure 1, element 6); (d) a motor frame which is mounted on a motor mounting frame (Column 3, lines 43-49); (e) a rotor which is mounted on the output shaft portion (Figure 1, element 64); and (f) a stator which is mounted on the motor frame (Figure 1, element 66).

Regarding Claim 2, Koide shows the apparatus as claimed as discussed in the rejection of Claim 1 above, including an apparatus wherein the rotor is a permanent magnet (Column 3, lines 50-53).

Regarding Claim 3, Koide shows the apparatus as claimed as discussed in the rejection of Claim 1 above, including an apparatus wherein one of the axial length of the stator core and the axial length of the rotor is longer than the other by at least the stroke of the transmission shaft (Figure 3, element 64, 66; Figure 4, element 64, 68).

Regarding Claim 5, Koide shows the apparatus as claimed as discussed in the rejection of Claim 1 above, including an apparatus wherein a position sensing portion is disposed between the output shaft portion and the motor frame (Figure 1, element 13).

Regarding Claim 7, Koide shows the apparatus as claimed as discussed in the rejection of Claim 1 above, including an apparatus wherein the driven portion is a screw (Figure 1, element 5); the motor frame is a motor frame for injection (Abstract); and the screw and the transmission shaft are connected through a bearing box (Figure 1, element 51).

Regarding Claim 8, Koide shows the apparatus as claimed as discussed in the rejection of Claim 7 above, including an apparatus wherein the bearing box is disposed inside a hollow output shaft of a metering motor (Figure 1, element 51, 22); and rotation of the output shaft is transmitted to the bearing box through a rotation transmitting portion (Figure 1; Column 4, lines 48-56).

Regarding Claim 9, Koide shows the apparatus as claimed as discussed in the rejection of Claim 1 above, including an apparatus wherein the drive portion is a crosshead of a toggle mechanism and the motor frame is a motor frame for mold clamping (Figure 7).

Regarding Claim 10, Koide shows the apparatus as claimed as discussed in the rejection of Claim 1 above, including an apparatus wherein the driven portion is a movable platen, and the motor frame is a motor frame for mold clamping (Figure 1, element 24, 25; Abstract).

Regarding Claim 11, Koide shows that it is known to carry out an injection molding method using an injection machine comprising a driven portion and a drive portion equipped with a transmission shaft having a screw shaft portion and an output shaft portion and connected to the driven portion so as to be able to rotate with respect thereto and which is able to advance and retract, a nut threadingly engaged with the screw shaft portion, a motor frame mounted on a motor mounting frame, a stator mounted on the motor frame, and a rotor mounted on the output shaft portion (Figure 1, 3, 4), characterized by advancing and retracting the rotor by driving the drive portion and rotating the rotor (Column 4, lines 43-63; and advancing and retracting the driven portion by advancing and retracting the transmission shaft (Column 4, lines 43-63).

Regarding Claim 12, Koide shows the apparatus as claimed as discussed in the rejection of Claim 11 above, including an apparatus wherein one of the axial length of

the stator core and the axial length of the rotor is longer than the other by at least the stroke of the transmission shaft (Figure 3, element 64, 66; Figure 4, element 64, 68).

Regarding Claim 13, Koide shows the apparatus as claimed as discussed in the rejection of Claim 11 above, including an apparatus wherein a position sensing portion is disposed between the output shaft portion and the motor frame (Figure 1, element 13).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Koide, in view of Applicant's Admitted Prior Art. Koide shows the apparatus as claimed as discussed in the rejection of Claim 1 above, but he does not show the nut being sercured to either the motor frame or the motor mounting frame. However, applicant notes that the machines of the prior art show the nut being secured to the frame (Para. 0013 of Originally Filed Specification). It would have been prima facie obvious to one of ordinary skill in the art at the time the invention was made to use the prior art nut location in Koide's apparatus in order for the machine to be secure and stable.

Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Koide, in view of Johansson et al. (U.S. Patent 4,318,021). Koide shows the apparatus as claimed as discussed in the rejection of Claim 1 above, but he does not show the stator coil being filled with resin. Johansson et al., hereafter "Johansson," show that it is known that the periphery of the stator coil of the stator is filled with a resin (Claim 6). It would have been prima facie obvious to one of ordinary skill in the art at the time the invention was made to use Johansson's resin-filled stator coil in Koide's apparatus in order to provide support to the stator coil.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MONICA A. HUSON whose telephone number is (571)272-1198. The examiner can normally be reached on Monday-Friday 7:00am-4:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christina Johnson can be reached on 571-272-1176. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Monica A Huson
Primary Examiner
Art Unit 1791

/Monica A Huson/
Primary Examiner, Art Unit 1791